

### **REMARKS**

This paper is being presented in response to the non-final official action dated December 30, 2005, wherein: (a) claims 1-13 are pending; (b) claims 1-13 were provisionally rejected on the grounds of nonstatutory obviousness-type double patenting ("ODP") as being unpatentable over claims 1-13 of copending application 10/331,729 in view of Kojima et al. U.S. Patent No. 5,766,498 ("Kojima") and Chen et al. U.S. Patent Application Publication No. 2003/0121608 ("Chen '608"); (c) claims 1 and 5-9 were rejected under 35 USC § 103(a) as being obvious over allegedly admitted prior art in view of Kojima and Chen '608; (d) claims 2, 3, 10, 12, and 13 were rejected under 35 USC § 103(a) as being obvious over allegedly admitted prior art in view of Kojima and Chen '608, and further in view of Satou et al. U.S. Patent No. 4,676,194 ("Satou"); (e) claim 4 was rejected under 35 USC § 103(a) as being obvious over allegedly admitted prior art in view of Kojima and Chen '608, and further in view of Dunham U.S. Patent No. 4,676,194 ("Dunham"); and, (f) claim 11 was rejected under 35 USC § 103(a) as being obvious over allegedly admitted prior art in view of Kojima and Chen '608, and further in view of Mena U.S. Patent No. 5,518,572 ("Mena"). Reconsideration and withdrawal of the rejections are respectfully requested in view of the following remarks.

#### **I. The ODP and 35 USC § 103(a) Rejections Are Traversed**

Claims 1-13 were provisionally rejected on the grounds of nonstatutory obviousness-type double patenting and were rejected under 35 USC § 103(a) as being obvious. All claim rejections rely on Chen '608. See pp. 2-7 of the action. However, Chen '608 is not available as a prior art reference for the teachings cited in the official action, and it is therefore respectfully requested that all present rejections be withdrawn.

The official action cites Chen '608 in relation to the ODP rejection and § 103(a) rejection for claim 1 for the following teachings:

Chen et al teaches a gas delivery apparatus for ALD. Figs. 1, 3, and 11-13 teach a showerhead with a cylinder and cone-shaped part.

See pp. 3-5 of the action. Further in relation to the § 103(a) rejection for claim 5, the action instructs: "see Figs. 5 and 6 of Chen et al." See p. 5 of the action.

The date of invention of applicant's claims is at least as early as July 19, 2002, based on the Korean priority application 2002-0042297 (the "Korean priority application"). This is supported by a verified English-language translation of the Korean priority application, which is attached hereto.

**A. The Provisional Applications of Chen '608 Do Not Provide the Necessary Disclosure to Support the Rejections**

Chen '608 has two priority dates on its face: (1) July 19, 2002 (filing date of U.S. provisional application Ser. No. 60/397,230; "Chen '230") and (2) October 26, 2001 (filing date of U.S. provisional application Ser. No. 60/346,086; "Chen '086"). A copy of Chen '086 is appended hereto.

Material disclosed in Chen '230 is unavailable as prior art to applicant's claims, because it was filed on the same day as (and thus was not prior to) the Korean priority application.

With reference to a gas delivery apparatus, Chen '086 does not disclose any structure combining *both* cylindrical *and* conical elements, as cited in the action. See pp. 3-5 of the action. Chen '086 shows gas passageways which are cylindrical only or conical only. No figures in Chen '086 are similar to Figures 5 and 6 of Chen '608.

**B. The Nonprovisional Alleged Priority Application of Chen '608 Does Not Support the Rejections**

Although not on the face of the publication, Chen '608 indicates that "this application further claims benefit of U.S. patent application Ser. No. 10/032,284, filed on Dec. 21, 2001. . . ." See Chen '608, at ¶ 0001.

However, the disclosure of Chen '284 is irrelevant when comparing Chen '608 with the applicant's claims because the reference to the 10/032,284 application ("Chen '284") is insufficient to properly claim the priority benefit of Chen '284. A valid priority claim to a domestic nonprovisional application must indicate the relationship between the two applications, designating whether the newly filed application is a continuation, divisional, or

continuation-in-part of the prior nonprovisional application. See 37 CFR § 1.78(a)(2)(i); MPEP § 201.11(III)(A).

The application of Chen '608 (Ser. No. 10/281,079, "Chen '079") was amended via preliminary amendment on July 11, 2003, to recite that it was a continuation-in-part of Chen '284. However, this amendment was not timely and Chen '608 does not adequately claim priority to Chen '284. See 37 CFR § 1.78(a)(2)(ii).

For the examiner's consideration, applicant submits herewith a Supplemental Information Disclosure Statement listing both Chen et al. U.S. Patent Application Publication No. 2003/0079686 ("Chen '686") and Chen et al. U.S. Patent No. 6,916,398 ("Chen '398"), which documents represent the published application and patent issuing from the Chen '284 application.

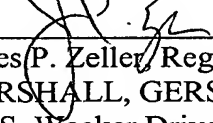
## II. Conclusion

Because nothing in the valid priority documents of Chen '608 available prior to applicant's July 19, 2002 priority date supports the structure cited in the official action, it is respectfully requested that Chen '608 be withdrawn as a reference against applicant's claims.

In view of the above remarks, applicant believes the pending application is in condition for allowance.

Respectfully submitted,

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By   
James P. Zeller / Reg. No. 28,491  
MARSHALL, GERSTEIN & BORUN LLP  
233 S. Wacker Drive, Suite 6300  
Sears Tower  
Chicago, Illinois 60606-6357  
(312) 474-6300  
Attorney for Applicant